WHAT IS CLAIMED IS:

1.   A method for processing decompressed image data, comprising:

receiving decompressed image data;

determining an estimated quantization table from the received

decompressed image data;

processing the decompressed image data based on the determined

estimated quantization table to form processed electronic image data.

2.   The method of claim 1, further comprising further processing the

decompressed image data without using the determined quantization table.

3.   The method of claim 1, wherein determining the estimated

quantization table comprises determining the estimated quantization table based on at

least one maximum likelihood estimation.

4.   The method of claim 3, further comprising generating the at least one

maximum likelihood estimation based on a probability function.

5.   The method of claim 3, further comprising generating the at least one

maximum likelihood estimation based on a Gaussian distribution.

6.   The method of claim 1, wherein the decompressed data comprises

image data blocks, and determining the estimated quantization table comprises:

determining, for each block, if that block has one of truncated image

data values or uniform image data values; and

excluding any block having at least one of truncated image data values

or uniform image data values.

7.   The method of claim 1, wherein determining the estimated

quantization table further comprises generating transformed image data from the

decompressed image data using a discrete cosine transform.

8.   The method of claim 7, wherein determining the estimated

quantization table further comprises generating a histogram from the transformed

image data.

9.   The method of claim 8, wherein determining the quantization table

comprises:

identifying a level of a main lobe of the histogram having a highest

peak and two adjacent levels of the histogram adjacent to the identified level; and

determining the quantization table based only on the identified and adjacent levels of the histogram.

10. The method of claim 8, wherein determining the estimated quantization table further comprises rounding each DCT coefficient of the transformed image data.

11. A system for processing compressed image data, comprising:

a receiver that receives decompressed image data;

a quantization table estimator that determines an estimated quantization table from the received decompressed image data; and

a processor that processes the decompressed image data based on the determined estimated quantization table to form processed electronic image data.

12. The system of claim 11, wherein the processor further processes the decompressed image data without using the determined quantization table.

13. The system of claim 11, wherein the quantization table estimator determines the estimated quantization table based on at least one maximum likelihood estimation.

14. The system of claim 13, further comprising a maximum likelihood estimator that generates the at least one maximum likelihood estimation based on a probability function.

15. The system of claim 13, further comprising a maximum likelihood estimator that generates the at least one maximum likelihood estimation based on a Gaussian distribution.

16. The system of claim 11, wherein:

the decompressed data comprises image data blocks: and

the quantization table estimator comprises a block analyzer that determines, for each block, if that block has one of truncated image data values or uniform image data values, wherein the quantization table estimator excludes any block having at least one of truncated image data values or uniform image data values.

17. The system of claim 11, wherein the quantization table estimator further comprises a DCT transformer that generates transformed image data from the decompressed image data using a discrete cosine transform.

18.   The system of claim 17, wherein the quantization table estimator further comprises a histogram generator that generates a histogram from the transformed image data.

19.   The system of claim 18, wherein:

the quantization table estimator further comprises a peak identifier that identifies a level of a main lobe of the histogram having a highest peak and two adjacent levels of the histogram adjacent to the identified level; and

the quantization table estimator determines the quantization table based only on the identified and adjacent levels of the histogram.

20.   The system of claim 18, wherein the quantization table estimator further comprises a coefficient rounding circuit that rounds each DCT coefficient of the transformed image data.